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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,975	12/12/2001	Eric Rosen	010559	4927

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QUALCOMM INCORPORATED
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EXAMINER	
FOX, BRYAN J	

ART UNIT	PAPER NUMBER
2617	

NOTIFICATION DATE	DELIVERY MODE
11/20/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/016,975	ROSEN ET AL.	
	Examiner	Art Unit	
	Bryan J. Fox	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 April 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,18-23,35-40,52-57 and 70-82* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,18-23,35-40,52-57 and 70-82* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *83-109* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Newly submitted claims 83-109 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the claims are directed towards the distinct invention of coordinating operation of a serving node and a mobile switching center.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 83-109 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 3, 18, 20, 35, 37, 52, 53, and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dailey (US006449491B1) in view of Hamalainen (US005966378A).

Regarding **claim 1**, Dailey discloses a system with a terminal 400 that includes a push-to-talk button 460, operatively associated with the controller 470 and used to initiate and conduct group calls (see column 7, lines 26-36). This system notifies the originating party that "wins" the traffic channel (see column 10, lines 8-20. A group call origination message is transmitted form an originating terminal (Block 705) and is received at one of the system transceiver units (see column 8, lines 38-44 and figure 7), which reads on the claimed "receiving a floor-control request from a source communication device for initiating a group call". In response, the system transmits a traffic channel designation message addressed to terminals in the group associated with the group call origination message (see column 8, lines 44-49 and figure 7), which reads on the claimed "initiating a service origination process from the source communication device". After designation of the common traffic channel, a confirm message is transmitted to the terminals of the group (see column 9, lines 47-49 and figure 8), which reads on the claimed "transmitting a response to the floor-control request," and, "configuring a communications manager (CM) to not respond immediately to the floor-control request." Dailey fails to expressly disclose avoiding a race condition between the service origination process and paging.

In a similar field of endeavor, Hamalainen discloses preventing collisions between transmissions in the uplink and in the downlink (see column 3, lines 6-14).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Dailey with Hamalainen to include the above prevention of collisions in order to avoid the loss of data.

Regarding **claim 3**, the combination of Dailey and Hamalainen discloses that the group call origination message is transmitted on a reverse control channel (see Dailey column 3, lines 52-56), which reads on the claimed "the receiving includes receiving the floor-control request on a reverse common channel".

Regarding **claim 18**, Dailey discloses a system with a terminal 400 that includes a push-to-talk button 460, operatively associated with the controller 470 and used to initiate and conduct group calls (see Dailey column 7, lines 26-36). This system notifies the originating party that "wins" the traffic channel (see Dailey column 10, lines 8-20), which reads on the claimed "computer readable medium comprising at least one instruction, which, when executed by a machine, causes the machine to perform operations." A group call origination message is transmitted form an originating terminal (Block 705) and is received at one of the system transceiver units (see column 8, lines 38-44 and figure 7), which reads on the claimed "receive a floor-control request from a source communication device for initiating a group call". In response, the system transmits a traffic channel designation message addressed to terminals in the group associated with the group call origination message (see column 8, lines 44-49 and figure 7), which reads on the claimed "initiate a service origination process for the

source communication device". After designation of the common traffic channel, a confirm message is transmitted to the terminals of the group (see column 9, lines 47-49 and figure 8), which reads on the claimed "transmit a response to the floor-control request". Dailey fails to expressly disclose avoiding a race condition between the service origination process and paging.

In a similar field of endeavor, Hamalainen discloses preventing collisions between transmissions in the uplink and in the downlink (see column 3, lines 6-14).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Dailey with Hamalainen to include the above prevention of collisions in order to avoid the loss of data.

Regarding **claim 20**, the combination of Dailey and Hamalainen discloses that the group call origination message is transmitted on a reverse control channel (see Dailey column 3, lines 52-56), which reads on the claimed "receive the floor-control request on a reverse common channel".

Regarding **claim 35**, Dailey discloses a system with a terminal 400 that includes a push-to-talk button 460, operatively associated with the controller 470 and used to initiate and conduct group calls (see column 7, lines 26-36). This system notifies the originating party that "wins" the traffic channel (see column 10, lines 8-20), which reads on the claimed "apparatus for avoiding simultaneous service origination and paging in a mobile operating in a group communication network". A group call origination message is transmitted form an originating terminal (Block 705) and is received at one of the system transceiver units (see column 8, lines 38-44 and figure 7), which reads on the

claimed "means for receiving a floor-control request from a source communication device for initiating a group call". In response, the system transmits a traffic channel designation message addressed to terminals in the group associated with the group call origination message (see column 8, lines 44-49 and figure 7), which reads on the claimed "means for initiating a service origination process from the source communication device". After designation of the common traffic channel, a confirm message is transmitted to the terminals of the group (see column 9, lines 47-49 and figure 8), which reads on the claimed "means for transmitting a response to the floor-control request". Dailey fails to expressly disclose avoiding a race condition between the service origination process and paging.

In a similar field of endeavor, Hamalainen discloses preventing collisions between transmissions in the uplink and in the downlink (see column 3, lines 6-14).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Dailey with Hamalainen to include the above prevention of collisions in order to avoid the loss of data.

Regarding **claim 37**, the combination of Dailey and Hamalainen discloses that the group call origination message is transmitted on a reverse control channel (see Dailey column 3, lines 52-56), which reads on the claimed "the receiving includes receiving the floor-control request on a reverse common channel".

Regarding **claim 52**, Dailey discloses a system with a terminal 400 that includes a push-to-talk button 460, operatively associated with the controller 470 and used to initiate and conduct group calls (see column 7, lines 26-36). This system notifies the

originating party that "wins" the traffic channel (see column 10, lines 8-20), which reads on the claimed "apparatus for avoiding simultaneous service origination and paging in a mobile operating in a group communication network". A group call origination message is transmitted form an originating terminal (Block 705) and is received at one of the system transceiver units (see column 8, lines 38-44 and figure 7), which reads on the claimed "receiver capable to receive a floor-control request for initiating a group call and a service origination process from a source communication device." In response, the system transmits a traffic channel designation message addressed to terminals in the group associated with the group call origination message (see column 8, lines 44-49 and figure 7). After designation of the common traffic channel, a confirm message is transmitted to the terminals of the group (see column 9, lines 47-49 and figure 8), which reads on the claimed "transmitter capable to transmit a response to the floor-control request." Further, the transceiver that has the transmitter and receiver is connected to a cellular radio exchange 614 and a mobility server 616 (see figure 6), and these devices together produce a machine such that the instructions which execute on the computer or other programmable data processing apparatus create means for implementing the functions specified in the flowchart block or blocks (see column 8, lines 7-28), so they must include the "processor communicatively coupled to the receiver and the transmitter" capable of the functions described above. Dailey fails to expressly disclose avoiding a race condition between the service origination process and paging."

In a similar field of endeavor, Hamalainen discloses preventing collisions between transmissions in the uplink and in the downlink (see column 3, lines 6-14).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Dailey with Hamalainen to include the above prevention of collisions in order to avoid the loss of data.

Regarding **claim 53**, the combination of Dailey and Hamalainen discloses that the group call origination message is transmitted on a reverse control channel (see Dailey column 3, lines 52-56), which reads on the claimed "the receiving includes receiving the floor-control request on a reverse common channel".

Regarding **claim 70**, Dailey discloses a system with a terminal 400 that includes a push-to-talk button 460, operatively associated with the controller 470 and used to initiate and conduct group calls (see column 7, lines 26-36). This system notifies the originating party that "wins" the traffic channel (see column 10, lines 8-20. A group call origination message is transmitted form an originating terminal (Block 705) and is received at one of the system transceiver units (see column 8, lines 38-44 and figure 7), which reads on the claimed "receiving a floor-control request from a source communication device for initiating a group call," and, "coordinating operation of a packet data serving node which receives a CM initiated response and a mobile switching center which responds to a talker's service origination request." In response, the system transmits a traffic channel designation message addressed to terminals in the group associated with the group call origination message (see column 8, lines 44-49 and figure 7), which reads on the claimed "initiating a service origination process from the source communication device". After designation of the common traffic channel, a confirm message is transmitted to the terminals of the group (see column 9, lines 47-49

and figure 8), which reads on the claimed "transmitting a response to the floor-control request," and, "not issuing a service origination request until after a talker mobile station has received a response to the floor-control request." Dailey fails to expressly disclose avoiding a race condition between the service origination process and paging.

In a similar field of endeavor, Hamalainen discloses preventing collisions between transmissions in the uplink and in the downlink (see column 3, lines 6-14).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Dailey with Hamalainen to include the above prevention of collisions in order to avoid the loss of data.

Regarding **claims 71-75**, the combination of Dailey and Hamalainen discloses After designation of the common traffic channel, a confirm message is transmitted to the terminals of the group (see column 9, lines 47-49 and figure 8), which reads on the claimed "transmitting a response after the service origination process is complete."

Regarding **claim 77**, the combination of Dailey and Hamalainen discloses that the group call origination message is transmitted on a reverse control channel (see Dailey column 3, lines 52-56), which reads on the claimed "the receiving includes receiving the floor-control request on a reverse common channel".

Claims 2, 19, 36, 53 and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dailey in view of Hamalainen as applied to claims 1, 18, 35 and 52 above, and further in view of Phillips et al (US005873023A).

Regarding **claims 2, 19, 36, 53 and 76**, the combination of Dailey and Hamalainen fails to expressly disclose caching the response before sending it.

In a similar field of endeavor, Phillips et al discloses a method for implementing a group call where messages may be queued before transmission (see column 5, lines 10-33). The queuing of a message reads on the claimed "caching".

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Dailey and Hamalainen with Phillips et al to include the above queuing of messages in order to avoid loss of information in the case that more than one message is to be sent at the same time or nearly the same time.

Claims 4, 5, 21, 22, 38, 39, 55, 56, 78 and 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dailey in view of Hamalainen as applied to claims 3, 9, 14, 20, 26, 31, 37, 43, 48, 54, 60 and 65 above, and further in view of Kumar et al (US006507572B1).

Regarding **claims 4, 21, 38, 55, and 78**, the combination of Dailey and Hamalainen discloses that the group call origination message is transmitted on a reverse control channel (see Dailey column 3, lines 52-56). The combination of Dailey and Hamalainen fails to expressly disclose the use of the reverse access channel.

In a similar field of endeavor, Kumar et al discloses a system where a mobile makes an access on the RACH at the primary to request channel assignment (see column 16, lines 56-65).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Dailey and Hamalainen with Kumar et al to include the above use of the RACH in order to be consistent with the standard of using the reverse channel for initial contact.

Regarding **claims 5, 22, 39, 56 and 79**, the combination of Dailey and Hamalainen discloses that the group call origination message is transmitted on a reverse control channel (see Dailey column 3, lines 52-56). The combination of Dailey and Hamalainen fails to expressly disclose the use of the reverse enhanced access channel.

In a similar field of endeavor, Kumar et al discloses a system where a mobile uses the R_EACH to request assignment of a dedicated traffic channel (see column 18, lines 8-10).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Dailey and Hamalainen with Kumar et al to include the above use of the reverse enhanced access channel in order to be consistent with the standard of using the reverse enhanced access channel to request assignment of a dedicated traffic channel.

Claims 6, 23, 40 and 57 rejected under 35 U.S.C. 103(a) as being unpatentable over Dailey in view of Hamalainen as applied to claims 3, 9, 20, 26, 37, 43, 48, 54, 60 and 65 above, and further in view of Wang et al (US 20020055364A1).

Regarding **claims 6, 23, 40 and 57**, the combination of Dailey and Hamalainen discloses that the group call origination message has a special abbreviated format (see Dailey column 3, lines 52-56). The combination of Dailey and Hamalainen fails to expressly disclose that the message is in short data burst form.

In a similar field of endeavor, Wang et al discloses a system that uses a short data burst (see figure 2).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Dailey and Hamalainen with Wang et al to include the above short data burst form in order to minimize the use of system resources by avoiding the need for a longer message.

Claim 80 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dailey in view of Hamalainen as applied to claim 70 above, and further in view of what was well known in the art (see MPEP 2144.03).

Regarding **claim 80**, the combination of Dailey and Hamalainen fails to disclose the floor-control request and a service origination request are bundled in an access channel capsule from the source communication device in the group communication network.

The Examiner takes Official Notice that bundling in an access channel capsule was well known in the art at the time of the invention.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Dailey and Hamalainen to include the above bundling in order to save bandwidth.

Claims 81 and 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Dailey, Hamalainen and what was well known in the art as applied to claim 80 above, and further in view of Wang.

Regarding **claim 81**, the combination of Dailey and Hamalainen fails to disclose the bundle has application data with CDMA signaling data.

In a similar field of endeavor, Wang discloses the use of CDMA signaling data (see paragraph 15).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Dailey and Hamalainen with Wang to include the above CDMA signaling data bundled with application data in order to extend the compatibility of the system.

Regarding **claim 82**, the combination of Dailey and Hamalainen fails to expressly disclose that the message is in short data burst form.

In a similar field of endeavor, Wang et al discloses a system that uses a short data burst (see figure 2).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Dailey and Hamalainen with Wang et al to include the above short data burst form in order to minimize the use of system resources by avoiding the need for a longer message.

Response to Arguments

Applicant's arguments filed April 22, 2007 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the prior art is directed towards a predefined group) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The Applicant argues the term collision is different from the race condition. The Examiner contends the collision reads on the broadest reasonable interpretation in light of the specification of "race condition."

The Applicant makes similar arguments with respect to the remainder of the claims, however, for the same reasons outlined above, the Examiner respectfully disagrees.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan J. Fox whose telephone number is (571) 272-7908. The examiner can normally be reached on Monday through Friday 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles N. Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bryan Fox
November 10, 2007

CHARLES N. APPIAH
SUPERVISORY PATENT EXAMINER